

REMARKS/ARGUMENTS

Claims 3, 4, 6 through 9, 12, 13 and 15 through 26 remain in this application. Claims 1, 2, 5, 10, 11 and 14 have been canceled. Claims 12, 13, 15 through 19 and 22 have been withdrawn from consideration. Claims 3, 4, 6 through 9, 12, 13 through 15, 17, 18 and 20 have been amended. New claims 23 through 26 are added. It is believed that none of the amendments introduce new matter.

In the outstanding Office Action mailed on March 10, 2010, the examiner finalized the requirement for restriction and withdrew claims 10, 12, 13, 15 through 19 and 33 from consideration. In addition, claims 1, 3, 4, 6 through 9, 20 and 21 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter, claims 1, 3, 8, 9 and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by Loosveld (EP 0657098), claim 4 was rejected under 35 U.S.C. § 103(a) as being obvious from Loosveld in view of Sjolund (US 6,830,008), claims 6 and 7 were rejected under 35 U.S.C. § 103(a) as being obvious from Loosveld in view of Wakui et al. (US 5,152,246), and claim 20 was rejected under 35 U.S.C. § 103(a) as being obvious from Loosveld in view of Mein (US 5,178,095). Applicants respectfully further traverses the restriction requirement and the rejections and submits that in view of the foregoing amendments and the following remarks, the requirement for restriction should be withdrawn and claims 3, 4, 6 through 9, 12, 13 and 15 through 26 should be deemed allowable.

Regarding the restriction requirement, it is clear that inventions of claims 23 and 24, the only remaining independent claims, are not independent and distinct, one from the other. Accordingly, these claims should be considered in the same application. In this regard, the method of claim 23 may be conducted only by using the apparatus of claim 24 and the apparatus of claim 24 is useful solely for the purpose of performing the method of claim 23. In

view of the foregoing, applicants submit that the requirement for restriction should be reconsidered and withdrawn.

Turning now to the rejection under 35 U.S.C. § 101, new claim 23 is clearly tied to a milk meter device and an analyzer device. Hence, the "machine-or-transformation test" is satisfied and this rejection should be reconsidered and withdrawn.

Claims 1, 3, 8, 9 and 21 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Loosveld (EP 0657098). Loosveld describes a milking process and milking system in which a milk flow sensor (27) is associated with each respective milk cluster (26) and generates a signal representing the milk flow. The generated signals are fed to a processing device which determines when milk flow data deviates from an expected value, for example indicating that an animal being milked is in heat or suggesting that the animal is suffering poor health. Based on the signals received, the processing unit (23) can derive information that may include: (a) milk flow period – that is the total milking time; (b) flow rate – defined as the average amount of milk flow during the milking period; (c) maximum milk speed – that is the peak flow rate; and (d) variation in the milk flow during the milking period (column 5, lines 2 to 20).

But in Loosveld, in spite of the examiner's statements to the contrary, there is no disclosure or suggestion of analyzing the data to detect an abnormal milk flow **from one teat** indicated by a predetermined departure from a predicted relationship between the milk flow rate and the time from commencement of milking, as specified in claim 23 of the present application, nor is there directly unambiguously derivable from Loosveld the feature of a device for analyzing data output by the milk meter to detect an abnormal milk flow **from one**

teat indicated by a predetermined departure from a predicted relationship between milk flow rate and the time of commencement of milking, as stipulated in claim 24 of the present application.

The examiner, relying on solely on the disclosure of Loosveld at col. 5, ll. 2 to 36, has simply leapt to the conclusion that Loosveld discloses or somehow suggests the concept of "analyzing the data to detect an abnormal flow from one teat." However, in applicants' view, Loosveld does not disclose such concept, either at col. 5, ll. 2-36, or anywhere else. That is to say, nowhere in Loosveld is there any suggestion regarding even the possibility that the data might be analyzed to detect an abnormal milk flow from one teat of the udder of an animal. A significant advantage of the method and apparatus of the application in suit is that they facilitate early detection of mastitis when only one udder quarter is infected, and Loosveld includes nothing in its disclosure that teaches or even hints at the fact that this can be achieved based on analysis of milk flow data. The identification of this possibility and its implementation forms the backbone of the invention of the present application and since it was hitherto unknown it could not be "implicit" within the disclosure of any prior art reference, including Loosveld. It is most certainly not an inevitable result that must follow from the methods and equipment described in Loosveld. Moreover, there is nothing contained in Loosveld that could lead one of ordinary skill in the art to conclude that abnormal milk flow from one teat can be distinguished from a variation due to a common condition affecting all four udder quarters.

In addition to the foregoing, claims 23 and 24 recite that "the detected departure is a departure from a predicted stepped reduction in the milk flow rate towards the end of the milking procedure for the animal." It is submitted that nowhere in Loosveld is there any disclosure or suggestion regarding the detection of a stepped reduction in milk flow rate at

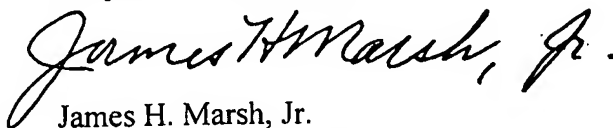
the end of milking. While Loosveld may refer to "variation in milk flow during the milking period", it does so only in the context that "one animal will reach a high milk flow rapidly while another animal's milk flow may be slower to rise" (col. 3, ll. 19 to 22). For this reason also, claims 23 and 24 are neither anticipated by nor rendered obvious by Loosveld.

Since independent claims 23 and 24 are most certainly novel and patentable over the disclosure of Loosveld, the dependent claims are also novel and patentable with respect thereto.

With the foregoing amendment, the application now includes only 18 claims total and only 2 independent claims. Accordingly, no additional filing fee is required.

In view of the foregoing amendments and remarks it is clear that the restriction requirement is unsupported by the record and should be withdrawn. Moreover, it is respectfully submitted that the claims remaining in this application are allowable and that the application is in condition for allowance. Accordingly, favorable action at an early date will be appreciated. If the examiner has any questions or comments, it is respectfully suggested that the applicants' undersigned attorney be contacted at the telephone number set forth below.

Respectfully submitted,



James H. Marsh, Jr.
Registration No. 24,533
STINSON MORRISON HECKER LLP
1201 Walnut Street, Suite 2900
Kansas City, MO 64106-2150
Telephone: (816) 842-8600
Facsimile: (816) 691-3495